TITLE 326 AIR POLLUTION CONTROL BOARD

Proposed Rule
LSA Document #06-604

DIGEST

Adds 326 IAC 8-14 concerning volatile organic compound emissions and limitations applicable to architectural and industrial maintenance coatings. Effective 30 days after filing with the Publisher.

HISTORY

First Notice of Comment Period: January 10, 2007, Indiana Register (DIN: 20070110-IR-326060604FNA).
Second Notice of Comment Period: October 15, 2008, Indiana Register (DIN: 20081015-IR-326060604SNA).
Notice of First Hearing: October 15, 2008, Indiana Register (DIN: 20081015-IR-326060604PHA).
Change in Notice of Public Hearing: December 3, 2008, Indiana Register (DIN: 20081203-IR-326060604CHA).
Change in Notice of Public Hearing: February 25, 2009, Indiana Register (DIN: 20090225-IR-326060604CHA).
Change in Notice of Public Hearing: February 3, 2010, Indiana Register (DIN: 20100203-IR-326060604CHA).
Change in Notice of Public Hearing: April 28, 2010, Indiana Register (DIN: 20100428-IR-326060604CHA).
Date of First Hearing: June 2, 2010.
Fiscal Impact Statement: July 21, 2010, Indiana Register (DIN: 20100721-IR-326060604FIA).

PUBLIC COMMENTS UNDER IC 13-14-9-4.5

IC 13-14-9-4.5 states that a board may not adopt a rule under IC 13-14-9 that is substantively different from the draft rule published under IC 13-14-9-4 until the board has conducted a third comment period that is at least 21 days long.

Because this proposed rule is not substantively different from the draft rule published on October 15, 2008, at 20081015-IR-326060604SNA, the Indiana Department of Environmental Management (IDEM) is not requesting additional comment on this proposed rule.

SUMMARY/RESPONSE TO COMMENTS FROM THE SECOND COMMENT PERIOD

IDEM requested public comment from October 15, 2008, through November 14, 2008, on IDEM's draft rule language. IDEM received comments from the following parties:

Eli Lilly and Company (ELC)
Improving Kids Environment (IKE)
Indiana Manufacturers Association, Inc. (IMA)
National Paint and Coatings Association (NPCA)

Following is a summary of the comments received and IDEM's responses thereto:

Comment: Improving Kids Environment supports the agency moving forward with this rulemaking for the following reasons:

1. These coatings can be a significant source of volatile organic compounds (VOCs), one of the key contributors to ground level ozone. Although ozone levels have been improving throughout Indiana, high ozone still presents a public health threat to our citizens throughout the state. Data presented by IDEM at the October 2008 Indiana Air Pollution Control Board meeting indicate that 12 counties measured ozone air quality in excess of the recently revised ozone health standard of 0.075 part per million (based on 2006-08 monitoring data). With the recent overturning of the Clean Air Interstate Rule and resulting uncertainty about continued power plant reductions of nitrogen oxides and sulfur dioxide, it is prudent to continue to implement reasonable measures to reduce harmful air pollutants where it makes sense to do so.
2. We are increasingly aware of the regional nature of ozone pollution. Concentrating control programs in the urban areas is no longer sufficient to address unhealthy ozone levels. Implementing cleaner AIM coatings across a broad geographic region will be most effective in improving air quality. Participating constructively with the regional consortium (LADCO) is neighborly and good public policy.
3. The market for AIM coatings is regional and national. Having different requirements in different states or different regions within states is disruptive, confusing, and does not lead to the most economically efficient result.
4. If and when U.S. EPA promulgates a rule addressing this category, IDEM and the other Midwest states can evaluate whether any adjustments need to be made. Indiana should not continue to wait for a federal rule that has been promised but not delivered. (IKE)

Response: IDEM is cognizant of the importance in addressing the ozone issue from a regional perspective. This rulemaking, in conjunction with the rulemakings conducted by the other LADCO states, will assist in

controlling VOCs in order to ensure compliance with U.S. EPA's newly issued 8-hour ozone standard and the proposed revised standard currently under consideration.

Ensuring that AIM coating requirements are consistent with other LADCO states and the eleven OTC states that have effective AIM rules, has been an important consideration for the department when drafting the rule language. IDEM understands the importance of consistency for a rulemaking that affects AIM coatings producers nationwide.

When U.S. EPA amends the existing federal AIM coatings rule (40 CFR Part 59, Subpart D), IDEM will amend the state AIM rule, if necessary. However, to date, U.S. EPA has not published their proposed revisions to the federal AIM rule. Therefore, IDEM is moving forward with this rulemaking.

Comment: The NPCA supports the proposed implementation date of January 1, 2010. (NPCA)

Response: IDEM had to complete a fiscal impact analysis for this rulemaking as required under Indiana Code, Section 4-22-2-28(c) and (e), which added additional time to the rulemaking schedule, and made IDEM's original proposed implementation date of January 1, 2010 impractical. Therefore, IDEM has amended the implementation date to January 1, 2011.

Comment: Lilly generally supports the concept of limiting VOC content in architectural and industrial maintenance (AIM) coatings as a step towards achieving the National Ambient Air Quality Standards for Ozone. By focusing the requirements of the rule on the production of the coating material itself, the rule can achieve environmental benefit at a reasonable cost.

Lilly believes, however, that the rule should apply only to the manufacture and sale of AIM coatings in Indiana, and users of AIM coatings should be outside the scope of the rule. IDEM's proposed rule extends liability and compliance management requirements to "any person who applies or solicits the application of any AIM coating within the state of Indiana." This means that any company that applies AIM coatings to its facilities, or hires someone to apply AIM coatings to its facilities is in violation of the proposed rule if a manufacturer or seller of an AIM coating provides a coating that does not meet the VOC content requirements of the proposed rule, or if a painting contractor uses noncompliant coatings. Extending liability to the party that has the least ability to control the VOC content of coatings is excessive, and merely serves a punitive purpose, not an air quality purpose.

Moreover, if proposed rule 326 IAC 8-14 were applicable to facility owners that are subject to the Title V operating permit program, the rule would be an "applicable requirement", and consequently must be contained in the facility's Title V permit. The responsible official for the facility (typically a plant manager) would then be required each year to certify the facility's compliance status with regard to the rule. In order to certify compliance status, the facility would have to develop a compliance management system that ensures it knows whether each and every AIM coating applied at the facility meets the requirements of Rule 8-14. For a large industrial or commercial facility, where AIM coatings are applied perhaps on a daily basis, developing a system to monitor and verify that each coating meets the requirements of Rule 8-14 would be quite extensive, and yet provide little environmental benefit because the true environmental benefit for the proposed rule occurs when the low VOC coating is manufactured.

Lilly recommends changing the draft rule language to remove references that would extend the applicability of the rule to "any person who applies or solicits the application of any AIM coating within the state of Indiana." (ELC)

Comment: The interest of the IMA in the proposed rule is primarily one of applicability. The greatest benefit for VOC reduction will occur in the reformulation of the product itself. The application of the product from current inventories will yield a finite amount of reduction and compared to the administrative burden there is a diminished return.

Manufacturing facilities are constantly engaged in maintenance projects which employ the use of various coatings. Many of these facilities are also subject to regulation under Title V. The proposed rule would ultimately be part of the facility's annual certification of compliance; and as a result, the facility would need to implement costly internal verification procedures to assure appropriate coatings were used. These procedures, however, would yield very little environmental benefit because the real environmental benefit of the proposed rule occurs at the point of coating production, not at the point of application.

Please consider modification of the draft rule to focus less on the end use of AIM coatings so as to avoid unnecessary burden to facility compliance efforts with limited environmental benefit. (IMA)

Response: IDEM reviewed the status of AIM coatings rules in the thirteen OTC member states. Eleven of the thirteen OTC states have effective AIM coatings rules and all eleven states extend applicability of the rule to persons that apply or solicit the application of any AIM coating. Additionally, Illinois and Ohio have effective AIM coatings rules that extend the applicability to persons who apply or solicit the application of AIM coatings.

IDEM understands ELC's concern about the extension of liability in the case where a painting contractor may apply a noncompliant coating. However, emissions of VOCs occur not just during the production of the coatings but also at the point of application. IDEM has made a commitment to institute an AIM coatings rule as part of Indiana's State Implementation Plan (SIP) development. The department has included the expected reductions of VOCs resulting from both manufacturing and end users as part of the SIP development process. Limiting the scope of applicability to exclude end users will result in the department failing to honor existing commitments

regarding regional ozone SIP planning and development.

Regarding concerns about extension of liability, companies that apply AIM coatings or hire contractors to apply coatings may ensure compliance by requiring that contracts for the application of coatings or coating purchases require the use of compliant coatings. Generally, manufacturers of coatings have this information readily available. The rule does require that facilities monitor more closely their usage and type of coatings, but, IDEM does not believe that such a requirement is overly burdensome as to require a change the scope of applicability of the rule that has been consistently utilized in the majority of states with AIM coating rules.

ELC and IMA are concerned that large industrial facilities, where AIM coatings are applied frequently, would be burdened by having to develop a system in order to monitor and verify that each coating meets the requirements of the rule. IDEM respectfully disagrees. Compliant coatings for the coating categories in this rule have been readily available for several years. Eleven of the thirteen OTC states, Ohio, and Illinois have nearly identical AIM coating rules in place, many which have been in effect since 2005. In all of these states, there are facilities that have Title V permits that are also subject to their state's AIM coatings rule. Additionally, the draft rule has sell through provisions that apply to all AIM coatings (326 IAC 8-14-3(d)). The sell through provisions allow: 1) coatings manufactured prior to January 1, 2011, to be sold, supplied or offered for sale until January 1, 2014; and 2) coatings manufactured before January 1, 2011, to be applied at any time both before and after January 1, 2011, so long as the coating complied with the standards in effect at the time the coating was manufactured. IDEM understands that sources may have coatings subject to this rule in their inventory or they may purchase noncompliant coatings after the effective date of the rule. The sell through provisions allow a phasing in of compliant coatings into the company's operations.

Comment: The draft rule has special provisions for traffic markings. IKE supports these requirements, but suggests that the limits be applied year round rather than just during the ozone season. Seasonal limitations add a layer of complication for implementation and compliance determinations. Without a compelling reason to adopt a seasonal limit, IKE urges uniformity and simplicity. (IKE)

Comment: For consistency with other OTC and LADCO AIM rules, NPCA suggests that IDEM drop the lower "ozone season" VOC limit from the rulemaking for traffic marking coatings and include only one VOC content limit of 150 g/l. (NPCA)

Response: The draft rule provides two VOC content limits for traffic marking coatings. One for the ozone season that runs from May 1 through September 30 (91 g/l) and one for the nonozone season that runs from October 1 through April 31 (150 g/l). The VOC content limit recommended by NPCA of 150 g/l is the VOC content limit for traffic marking coatings in the existing federal AIM coatings rule (40 CFR Part 59, Subpart D). Manufacturers of traffic marking coatings are already subject to this VOC content limit.

Including more stringent VOC limits for traffic marking coatings in the rule was part of LADCO's recommendations to its member states as part of the regional effort to control ozone. The draft rule language is from Wisconsin's rule limiting the VOC content of traffic marking coatings (NR 422.17). The more stringent VOC content limit for traffic markings is approximately 39% lower than the limit imposed by the federal rule and the OTC model rule.

Sources subject to the traffic marking coating VOC content limit and 326 IAC 8-14-7 (application of traffic marking materials) of the draft rule, may comply with the lower VOC content limit year round if it would be more effective or efficient for them to do so. The rule does not compel a source to comply with the lower limit only during the ozone season.

Comment: Lilly recommends the following changes to the proposed rule shown by underlining:

326 IAC 8-14-2 Definitions

(70) "Traffic marking coating" means a coating labeled and formulated for marking and striping publicly-owned streets, publicly-owned highways, or other publicly-owned traffic surfaces, including, but not limited to, the following:

(A) Curbs.
(B) Berms.
(C) Driveways.
(D) Parking lots.
(E) Sidewalks.
(F) Airport runways. (ELC)

Response: The definition that IDEM used for traffic marking coatings in the draft rule is the definition for traffic marking coatings that is used in the existing federal AIM coatings rule (40 CFR Part 59, Subpart D) and the OTC model rule. IDEM will maintain consistency with the existing federal AIM coatings rule and the OTC model rule.

Comment: NPCA recommends adding "Reactive Penetrating Carbonate Stone Sealer" to the definitions and VOC table. Carbonate stone, and in particular Indiana limestone is widely utilized as an exterior structural and facade component in commercial and institutional construction. Limestone, marble and other carbonate substrates are generally durable and sustainable; however, they are subjected to accelerated weathering and decay due to biological growth, water intrusion and freeze/thaw cycles, and are particularly sensitive to acid rain. The northeastern United States has an estimated inventory of 50,000 buildings, 10,000 memorials and tens of

millions of grave markers constructed of carbonate stone subject to acid rain degradation that needs protection.

Penetrating reactive carbonate stone sealers are typically specified by building maintenance specialists and conservators. These sealers function by penetrating the surface and reacting at a molecular level and do not form a surface film and therefore allow outward migration of internal moisture while preventing water intrusion. Since carbonate stone does not contain necessary silicates for reaction so a "bridging" silicate source is required, however these products are incompatible with aqueous carriers so a higher VOC content is needed. Please add the provided definition of "Reactive Penetrating Carbonate Stone Sealer" to the definitions and VOC table (600 g/L). (NPCA)

Response: IDEM reviewed the AIM coating rules of the OTC states and Ohio. This coating category for reactive penetrating carbonate stone sealer is not included in any of the rules that IDEM reviewed. Throughout this rulemaking, IDEM has strived to ensure consistency with the OTC model rule and neighboring states' AIM coating rules. Imposing new VOC content restrictions on a coating category that is not covered in a majority of AIM coatings rules adds complexity for regional and national manufacturers. In order to maintain consistency with other states' AIM coating rules IDEM has not included the coating category for reactive penetrating carbonate stone sealer. If, and when, the federal rule is revised, and if it includes this coating category, IDEM will consider amending Indiana's AIM rule.

Comment: The category definition for waterproofing concrete/masonry sealers in the current OTC model rule was adopted from regulatory language that has been corrected in the South Coast Air Quality Management District and is in the process of being corrected in the California Air Resource Board's (CARB) revised Suggested Control Measure (SCM). As written, the definition applies to film forming coatings; however, it is broadly recognized that this class of materials also includes penetrating, clear water, and stain repellents that do not form films in the traditional sense. Additionally, CARB has recognized that the list of properties in the proposed definition is not necessarily all inclusive for every type of coating in this diverse category. Instead, NPCA recommends that the words "film forming" be deleted from the definition of waterproofing concrete/masonry sealers. (NPCA)

Response: IDEM removed the words "film forming" from the definition of waterproofing concrete or masonry sealer at 326 IAC 8-14-2(75).

Comment: NPCA recommends that the record keeping and reporting requirements for perchloroethylene and methylene chloride, recycled coatings, and bituminous roof coatings be changed. It is important to note that these "automatic reporting" requirements originated from the California Air Resources Board (CARB) 2000 AIM SCM and were subsequently included in the OTC model rule. However, in October 2007, CARB deleted these reporting requirements from the 2007 AIM SCM since it felt that this information was no longer needed. NPCA suggests that to be consistent with CARB that IDEM delete these requirements as well. If over the objection of NPCA, IDEM does not delete these requirements, NPCA requests that IDEM include a 90 day period of time for manufacturers to report this information. (NPCA)

Response: IDEM amended the record keeping and reporting requirements for the following: AIM coatings that contain perchloroethylene or methylene chloride (326 IAC 8-14-5(d)); recycled coatings (326 IAC 8-14-5(e)); and bituminous roof coatings or bituminous roof primers (326 IAC 8-14-5(f)). The automatic reporting requirements were removed. However, the department generally gives a source thirty (30) days to submit a report, not ninety (90) and has amended the rule language accordingly to represent the department's general practice.

Comment: There is an overlap issue with the definitions for flat and nonflat coatings. A coating with a 60 degree gloss of 6 and an 85 degree gloss of 10 could be considered either, based on the proposed definitions. NPCA recommends the following:

"Flat ~~Architectural~~ coating" means a coating that does not meet the definition in this regulation for another coating and which registers a gloss of less than 15 on an 85-degree gloss meter ~~held at an 85^{o} angle to the coated surface~~ or less than 5 on a 60-degree gloss meter ~~held at a 60^{o} angle, and which is described on the label as a flat coating,~~ according to ASTM Designation D 523-89 (1999), incorporated by reference in paragraph 33.6.5(c) of this regulation. "Non-flat ~~Architectural~~ coating" means a coating that does not meet the definition in this regulation of another coating and which registers gloss of 15 or greater on an 85-degree gloss meter ~~held at an 85^{o} angle to the coated surface~~ and 5 or greater on a gloss meter when held at a 60^{o} angle, according to ASTM Designation D 523-89 (1999), incorporated by reference in paragraph 33.6.5(c) of this regulation. (NPCA)

Response: The language included in the comment from NPCA does not match the definitions of flat coating at 326 IAC 8-14-2(26) and nonflat coating at 326 IAC 8-14-2(41) in the published draft rule language. However, IDEM amended the two definitions to clarify and remove the overlap issue in response to NPCA's comment. This amendment is also consistent with the Illinois' and Ohio's definitions of flat and nonflat coatings.

Comment: The reporting requirements under Section 5(a) are very extensive and while NPCA appreciates that IDEM included a 90 day period of time for manufacturers to reply, for the amount of information requested, additional time will be needed. To help alleviate this problem, NPCA recommends that IDEM grant manufacturers extensions if these extensions are requested in writing. NPCA recommends revising the language in Section 5(a)

as follows:

Such records shall be kept for a period of not less than five (5) years and shall be made available to the Department for inspection within 90 days of request, unless an extension of time is granted by the State (as per written manufacturer request for extension). (NPCA)

Response: IDEM reviewed the AIM coating rules of the OTC states and Ohio. Based on IDEM's review of those rules, the standard period of time given to manufacturers to reply to a request from the department is 90 days with no language providing for an extension. The reporting requirements in section 5(a) are similar, if not identical, to those required by the OTC states and Ohio. To maintain consistency with other states' AIM coating rules, Indiana will not grant extensions to the 90 day reporting requirement.

Comment: For consistency with the Illinois and other OTC state rules, NPCA suggests that Section 3(g) regarding rust preventive coatings be replaced with the following:

"No person shall apply or solicit the application of any rust preventive coating for industrial use unless such a rust preventive coating complies with the industrial maintenance coating VOC limit specified in subsection (b). If the coating is also regulated under another Part, the more restrictive limit shall apply." (NPCA)

Response: IDEM reviewed the language in 326 IAC 8-14-3(g) regarding rust preventative coatings. In the draft rule language that published in the Second Notice of Comment Period, IDEM included additional requirements for rust preventative coatings based on Ohio's AIM rule. However, after reviewing the OTC model rule and other OTC states' rules, IDEM amended the language to match the OTC model rule language.

Comment: NPCA recommends clarifying that section 4(4) applies to Industrial Maintenance Coatings and revise as follows:

Industrial Maintenance Labels - The label or the lid of the container in which the coating. . .. (NPCA)

Response: IDEM amended the language in section 4(4) to clarify that the section applies to industrial maintenance coatings.

SUMMARY/RESPONSE TO COMMENTS RECEIVED AT THE FIRST PUBLIC HEARING

On June 2, 2010, the Air Pollution Control Board (board) conducted the first public hearing/board meeting concerning the development of a new rule at 326 IAC 8-14. Comments were made by the following parties:

Eli Lilly and Company (ELC)

Indiana Construction Association (ICA)

Following is a summary of the comments received and IDEM's responses thereto:

Comment: The Indiana Construction Association (ICA) is a statewide trade association of building, heavy, highway and utility contractors. While our comments focus on traffic marking paint and epoxy penetrating sealer, ICA continues to research the potential impact of this proposal on other coatings used in the construction industry. ICA is particularly interested in the availability and quality of products that comply with the proposed VOC limits and costs. ICA may have information relative to other products when the proposal reaches the next step of the rulemaking process. ICA recommends that the ozone season limit be increased from 91 grams/liter to 105 grams/liter. This would allow a broader range of products to be used, with the resulting added competition helping to control costs. Even at 105 grams/liter, the limit would be well below the allowable threshold for most other products. (ICA)

Response: The proposed rule has two separate VOC content limits for traffic marking coatings. Traffic marking coatings applied during the ozone season (May 1 to September 30) have a limit of 91 grams/liter and coatings applied during the nonozone season (October 1 to April 30) have a limit of 150 grams/liter.

In the State of Indiana, the Indiana Department of Transportation (INDOT) is one of the largest users of traffic marking coatings. Using estimates from INDOT regarding the amount of paint that the agency and their contractor's will order this year (2010) for traffic marking applications, IDEM calculated the increase in VOC emissions if the ozone season VOC content limit was increased from 91 grams/liter to 105 grams/liter. IDEM determined that the increase in area source emissions would be negligible. Per ICA's request, IDEM will increase the ozone season (May 1 to September 30) VOC content limit for traffic marking materials to 105 grams/liter in the rule proposed for final adoption.

Comment: While products satisfying the 150 grams/liter content limit would be suitable for some of the fall and spring season, where temperature and humidity levels can greatly impact product performance, ICA believes products that are currently allowed under the U.S. EPA regulation should be allowed during a limited three to four week window during the late fall. The placement of traffic markings-whether permanent or temporary-is one of the final operations during the highway construction season. If other work is postponed for any number of valid reasons, the placement of traffic markings may need to occur during less than suitable climatic conditions. Yet it is imperative that secure markings be placed for the safety of motorists. (ICA)

Response: The federal architectural and industrial maintenance (AIM) coatings rule at 40 CFR Part 59, Subpart D, Ozone Transport Commission (OTC) model rule, and Indiana's proposed rule all use the same definition for traffic marking coatings. A "traffic marking coating" is defined as a "coating formulated and recommended for marking and striping streets, highways, or other traffic surfaces including, but not limited to, curbs, berms, driveways, parking lots, sidewalks, and airport runways." The federal rule and OTC model rule both

have a VOC content limit of 150 grams/liter for traffic marking coatings, which is the same as Indiana's proposed VOC content limit for traffic markings during the non-ozone season (October 1 through April 30).

However, the federal rule contains a separate definition and VOC content limit for zone marking coatings. Under the federal rule, a "zone marking coating" is defined as a "coating formulated and recommended for marking and striping driveways, parking lots, sidewalks, curbs, or airport runways, and sold or distributed in a container with a volume of 19 liters (5 gallons) or less. The VOC content limit for a zone marking coating under the federal rule is 450 grams/liter. Because of the overlap of definitions of zone marking coating and traffic marking coating in the federal rule, an exception paragraph is provided at 40 CFR Part 59.402(c)(16) which clarifies that zone marking coatings that also meet the definition for traffic marking coatings are subject only to the federal VOC content limit for zone marking coatings.

The U.S. EPA published the federal AIM coatings rule on September 11, 1998, and the rule went into effect one year later on September 11, 1999. The OTC model rule for AIM coatings was finalized in 2001. The OTC model rule does not contain a separate definition for zone marking coatings. The OTC model rule's definition of traffic marking coatings and VOC content limit for traffic marking coatings subsumed the federal definition and VOC content limit (450 grams/liter) for zone marking coatings. Therefore, states that have adopted AIM coatings regulations based on the OTC model rule no longer recognize the zone markings coating category and coatings that could have previously fallen under the zone marking coatings exception in the federal rule must now satisfy the VOC content limits for traffic marking coatings which is 150 grams/liter.

ICA requested a limited three to four week window in the late fall to apply products that would exceed the proposed rule's VOC content limit of 150 grams/liter for traffic marking coatings during the non-ozone season but presumably fall under the federal rule's definition of zone marking coatings. IDEM reviewed the AIM coatings rules of the other states that have adopted the OTC model rule and those states do not recognize the federal exception for zone marking coatings. All traffic coatings must comply with the 150 grams/liter VOC content limit. Furthermore, Indiana's neighboring states of Illinois and Ohio, which have effective AIM coatings rules based on the OTC model rule, require all traffic marking coatings to meet the 150 grams/liter VOC content limit. These states must deal with seasonal challenges very similar to Indiana's when applying traffic marking coatings, and they have not reported any performance issues with compliant coatings applied during the late fall. IDEM believes the nonozone season VOC content limit of 150 grams/liter that has been adopted by several other states is appropriate and should not be amended.

Comment: For other materials covered by this proposal, the record keeping requirements apply only to the product manufacturer. ICA doesn't think there is any justification for treating traffic marking materials differently. Furthermore, IDEM's draft rule that the Air Pollution Control Board is considering requires those records to be maintained for five years. This is two additional years compared to the original Second Notice of Comment Period version published on October 15, 2008. (ICA)

Response: Prior to preliminary adoption of the proposed rule, IDEM amended the record keeping requirement under 326 IAC 8-14-7, "Application of traffic marking materials", to be internally consistent with other record keeping requirements in the rule at 326 IAC 8-14-5. The record keeping requirements at 326 IAC 8-14-5 require each manufacturer of a product subject to a VOC content limit in the rule to maintain records for a period of five years.

The Wisconsin traffic marking rule (NR 422.17), on which the rule language for traffic marking materials is based, requires records to be maintained for a period of three years and requires any person subject to the rule who applies traffic marking materials to maintain records. IDEM will amend the record keeping requirements for traffic marking coatings under 326 IAC 8-14-7 to be consistent with the language in Wisconsin's traffic marking rule and require records for traffic marking materials to be maintained for a period of three years instead of five years.

Comment: While most other effective dates in the proposed rule were pushed back one year as a result of the several changes in the date for this hearing, the January 1, 2011 date in Section 7 of the rule has not been revised. The wording in this section also appears to nullify for traffic markings, the sell-through provisions in Section 3(d) of the rule that allow materials manufactured before the effective date of this rule to be sold and used for an extended period of time.(ICA)

Response: The January 1, 2011 date is cited consistently throughout the proposed rule as the effective date of the rule. This rule is expected to be finalized and effective in late 2010 or early 2011. IDEM will amend the current implementation date in the proposed rule prior to final adoption from January 1, 2011 to October 1, 2011 in order to provide adequate time for manufacturers and users of AIM coatings to meet rule requirements.

Additionally, IDEM will amend the language in 326 IAC 8-14-7(a), "Application of traffic marking materials", to ensure that the sell through provisions for AIM coatings in 326 IAC 8-14-7(d) applies to traffic marking materials.

Comment: ICA's other area of concern pertains to epoxy-penetrating sealer, which is a product used to protect concrete bridge decks. ICA believes, although is not able to verify, that none of the products approved for use by the INDOT comply with the proposed VOC limits. While products with lower VOC limits are available in the market, INDOT requires that contractors use only those products on its approved list. Unless INDOT were to find that other products are acceptable, adoption of this rule would put contractors in a Catch 22 situation of not being

able to use the INDOT acceptable products because of their VOC content, but not being able to use other products due to lack of acceptability to INDOT. ICA also understands that contractors would have to invest in new equipment to use some of the thicker, lower VOC products because those products could not be sprayed using existing equipment. (ICA)

Response: INDOT's Office of Materials Management is in the process of checking whether epoxy penetrating sealers on its approved materials list comply with the proposed VOC content requirement. It is not yet known with certainty whether any of the approved products meet the proposed rule's VOC content requirement. It takes approximately six months to a year for INDOT to approve a new product to be added to their materials list.

IDEM recognizes the difficulties that INDOT contractors will face if compliant products have not been approved by INDOT prior to the rule's implementation date. INDOT is aware of this rulemaking and its impact on their operations and is currently working on assessing their approved materials list to determine compliance with the proposed VOC content limits. IDEM will amend the implementation date of the proposed rule to October 1, 2011, in order to give users of AIM coatings like INDOT additional time to find and approve compliant products, if necessary.

Comment: Eli Lilly and Company ("Lilly") owns and operates several facilities in Indiana that would be subject to this, including three sites which are subject to the Title V operating permit program. Lilly generally supports the concept of limiting VOC content in architectural and industrial maintenance coatings as a step towards achieving the National Ambient Air Quality Standards (NAAQS) for ozone. By focusing the requirements of the rule on the production of the coating material itself, the rule can achieve environmental benefit at a reasonable cost and with great efficiency. Once manufacturers begin producing compliant coatings, especially in the context of multi-state or national programs, then virtually all of the coatings that are used in commerce will be low emitting coatings when applied. When a facility owner such as Lilly purchases and applies a coating, the chances of that coating not meeting the standards of IDEM's rule are very slim.

IDEM's proposed rule extends liability and compliance management requirements to "any person who applies or solicits the application of any AIM coating within the State of Indiana." This means that any company that applies coatings to its facilities or hires someone to apply coatings to its facilities, has a new Clean Air Act obligation to use compliant AIM coatings. As a result, because rule 326 IAC 8-14 will apply to facility owners that are subject to the Title V operating permit program, the rule would be an "applicable requirement", and consequently must be contained in the facility's Title V permit. The responsible official for the facility would then be required each year to certify the facility's compliance status with regard to the rule. In order to certify compliance status, the facility would have to develop a compliance management system that ensures it knows whether the AIM coatings applied at the facility meet the requirements of rule 8-14. For a large industrial or commercial facility, where various AIM coatings are applied, perhaps on a daily basis, throughout the plant site, developing a system to monitor and verify the coatings meet the requirements of Rule 8-14 would be quite extensive, and yet provide little environmental benefit because the true environmental benefit for the proposed rule occurs when the low VOC coating is manufactured and sold.

Lilly's Corporate Center in downtown Indianapolis and our Lilly Technology Center on the southwest side of Indianapolis are both good examples of how implementing the rule becomes complicated and a heavy burden for companies that want to comply with all their Clean Air Act requirements. Both of these sites are large, complex facilities that consist of dozens of buildings that are constantly undergoing various painting and maintenance activities that involve coatings subject to the proposed rule. In any given week, there could be a dozen different contractors or Lilly employees applying AIM coatings throughout the facilities. We can specify in our purchasing contracts that all coating must be compliant coatings, and we can specify in our building maintenance contracts that our contractors use compliant coatings. But the existence of those contracts does not satisfy the requirement of the Title V compliance certification that we conduct a reasonable inquiry into our operations to ensure that we are in compliance with Clean Air Act requirements such as the AIM coatings rule.

It is not clear what a reasonable inquiry is for an obligation such as being required to use compliant AIM coatings. It probably doesn't mean checking every single coating used at the sites. On the other hand it clearly doesn't mean depending on contractors to follow their contracts without ever checking the coatings they are using. When you consider that sites like ours and other large industrial sites may use hundreds of different AIM coatings in the course of a year, you can begin to understand how baffling and potentially burdensome this issue can become.

In response to the comments Lilly submitted on this rule during the Second Notice of Comment Period, IDEM avoided providing a direct response to our concerns about the administrative burden of ensuring everyone at our sites was using compliant coatings. IDEM's response noted that all the other states that have adopted AIM coatings rules have extended liability to the owners and operators of facilities where coatings are applied, and that those states have sources subject to Title V permitting requirements too. The response implicitly suggests that because no other states attempted to address the issue, than Indiana does not need to address it either.

IDEM did suggest that Lilly could limit potential liability by requiring compliant coatings in our purchasing and maintenance contracts. We agree that such contracts can greatly reduce our potential liability. That is not our concern, however. As stated earlier, Lilly is concerned that the existence of those contracts alone does not

constitute a reasonable inquiry for the purposes of meeting our Title V compliance certification requirements, and that we, and others, will expend unnecessary administrative resources establishing an internal system to ensure that the coatings are compliant.

Lilly understands that if sources are not using compliant coatings then the objective of the rule is undermined. We believe, however, that the vast majority of the benefit of this rule occurs when the coatings are manufactured and sold. At that point, nearly all of the coatings that are used in the field will be compliant coatings because those are the coatings that will be readily available in the market. The benefit of the rule will be widely achieved. After the market is filled with compliant coatings, the only people who will be using noncompliant coatings will be those who are intentionally purchasing noncompliant coatings or those who have been tricked to believe their coatings are compliant coatings. These folks will comprise only a very small portion of the businesses applying AIM coatings. It will be difficult to find these noncompliant actors. And meanwhile, Indiana facilities that wrestle with the issue of conducting their Title V compliance certifications correctly will take on additional administrative cost for minimal, if any, environmental benefit.

Lilly requests that all references to potential applicability of the rule to facilities that apply coatings or have coatings applied for them be taken from the rules. (ELC)

Response: IDEM has committed to implement a VOC AIM coatings rule per LADCO's recommendation to its member states and the department has included the expected reductions of VOCs resulting from both manufacturing and end users as part of the Indiana's State Implementation Plan development process. As ELC notes, limiting VOC content in AIM coatings is a step towards assisting Indiana in maintaining and achieving the NAAQS for ozone. Currently, U.S. EPA is considering lowering the existing 8-hour ozone NAAQS of 0.075 parts per million. U.S. EPA will issue a final decision by August 31, 2010. Once Indiana has an effective AIM coatings rule, the state will be able to receive credits for VOC reductions to assist ozone nonattainment counties in meeting the 8-hour ozone NAAQS.

The following states or jurisdictions have adopted an AIM coatings rule with applicability that extends to users of AIM coatings: California, Connecticut, Delaware, District of Columbia, Illinois, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, and Virginia. Approximately 45% of the United States population is subject to the VOC content limits for AIM coatings in the proposed rule. Furthermore, Title V facilities exist in all of these states and those facilities must comply with their state's AIM coatings VOC regulations. IDEM's response to ELC's concerns during the Second Notice of Comment Period did not mean to implicitly suggest that no other states attempted to address the issue. IDEM discussed this issue with representatives from the states mentioned above and no other state found ELC's concerns regarding Title V compliance certification to be an issue that placed an undue burden upon facilities like the ones alluded to in ELC's comments.

IDEM believes that the primary compliance obligation is on manufacturers and others who sell AIM coatings products in Indiana. The majority of the rule requirements including container labeling (326 IAC 8-14-4), record keeping and reporting (326 IAC 8-14-5) and compliance provisions and test methods (326 IAC 8-14-6) do not apply to users of AIM coatings.

However, in addition to manufacturers, IDEM believes that users of AIM products should also be responsible for ensuring they are using compliant products, particularly when non-compliant products are available in the market. IDEM disagrees with the statement that "after the market is filled with compliant coatings, the only people who will be using noncompliant coatings will be those who are intentionally purchasing noncompliant coatings...." Compliant coatings are readily available in the market, and facilities such as those operated by ELC that use a multitude of AIM coatings have a responsibility to ensure that their contractors and employees are complying with Indiana's VOC regulations. Without a national rule in place, noncompliant products can be easily obtained. Failing to extend applicability of this rule to users of AIM coatings will mean that a significant portion of reduction potential will be lost.

IDEM reiterates that compliance obligations may be achieved by requiring compliant coatings in purchasing and maintenance contracts. The proposed rule does require that facilities take on some additional administrative responsibilities to ensure that employees and contractors are aware of the facility's compliance obligations, but, IDEM does not believe that the requirements and additional administrative due diligence is overly burdensome as to require a change to the scope of applicability of the proposed rule. IDEM does not believe it is necessary to amend the applicability of the rule.

Small Business Assistance Information

IDEM established a compliance and technical assistance (CTAP) program under IC 13-28-3. The program provides assistance to small businesses and information regarding compliance with environmental regulations. In accordance with IC 13-28-3 and IC 13-28-5, there is a small business assistance program ombudsman to provide a point of contact for small businesses affected by environmental regulations. Information on the CTAP program, the monthly CTAP newsletter, and other resources available can be found at:

http://www.in.gov/idem/4108.htm

Small businesses affected by this rulemaking may contact the Small Business Regulatory Coordinator:

Alison Surface

IDEM Compliance and Technical Assistance Program - OPPTA
MC 60-04 IGCS W041
100 North Senate Avenue
Indianapolis, IN 46204-2251
(317) 232-8172 or (800) 988-7901
ctap@idem.in.gov

The Small Business Assistance Program Ombudsman is:
Brad Baughn
IDEM Small Business Assistance Program Ombudsman
MC 50-01 IGCN 1307
100 North Senate Avenue
Indianapolis, IN 46204-2251
(317) 234-3386
bbaughn@idem.in.gov

326 IAC 8-14

SECTION 1. 326 IAC 8-14 IS ADDED TO READ AS FOLLOWS:

Rule 14. Architectural and Industrial Maintenance (AIM) Coatings

326 IAC 8-14-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-12

Sec. 1. This rule applies to any person who supplies, sells, offers for sale, or manufactures any AIM coating for use within the state of Indiana, as well as any person who applies or solicits the application of any AIM coating within the state of Indiana, except for the following:

(1) Any AIM coating that is sold or manufactured for:
(A) use outside of the state of Indiana; or
(B) shipment to other manufacturers for reformulation or repackaging.
(2) Any aerosol coating product.
(3) Any AIM coating that is sold in a container with a volume of one (1) liter (one and fifty-seven thousandths (1.057) quarts) or less.

(Air Pollution Control Board; 326 IAC 8-14-1)

326 IAC 8-14-2 Definitions

Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-12

Sec. 2. The following definitions apply throughout this rule:
(1) "Adhesive" means any chemical substance that is applied for the purpose of bonding two (2) surfaces together other than by mechanical means.
(2) "Aerosol coating product" means a pressurized coating product containing pigments or resins that:
(A) dispenses product ingredients by means of a propellant; and
(B) is packaged in a disposable can for hand-held application or for use in specialized equipment for ground traffic or ground marking applications.
(3) "AIM coatings" means architectural and industrial maintenance coatings.
(4) "Antenna coating" means a coating labeled and formulated exclusively for application to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals.
(5) "Antifouling coating" means a coating labeled and formulated for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms. To qualify as an antifouling coating, the coating must be registered

with the U.S. EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136).
(6) "Appurtenance" means any accessory to a stationary structure coated at the site of installation, whether installed or detached, including, but not limited to, any of the following:
(A) Bathroom and kitchen fixtures.
(B) Cabinets.
(C) Concrete forms.
(D) Doors.
(E) Elevators.
(F) Fences.
(G) Hand railings.
(H) Heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools.
(I) Lampposts.
(J) Partitions.
(K) Pipes and piping systems.
(L) Rain gutters and downspouts.
(M) Stairways.
(N) Fixed ladders.
(O) Catwalks and fire escapes.
(P) Window screens.
(7) "Architectural coating" means a coating to be applied to any of the following:
(A) Stationary structures or the appurtenances at the site of installation.
(B) Portable buildings at the site of installation.
(C) Pavements.
(D) Curbs.
The term does not include adhesives, coatings applied in shop applications, or coatings applied to nonstationary structures, such as airplanes, ships, boats, railcars, and automobiles.
(8) "Bitumens" means black or brown materials, including, but not limited to, asphalt, tar, pitch, or asphaltite, that:
(A) are soluble in carbon disulfide;
(B) consist mainly of hydrocarbons; and
(C) are obtained from natural deposits or as residues from the distillation of crude petroleum or coal.
(9) "Bituminous roof coating" means a coating that incorporates bitumens that is labeled and formulated exclusively for roofing.
(10) "Bituminous roof primer" means a primer that incorporates bitumens that is labeled and formulated exclusively for roofing.
(11) "Bond breaker" means a coating labeled and formulated for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured.
(12) "Calcimine recoaters" means flat solvent borne coatings formulated and recommended specifically for recoating calcimine-painted ceilings and other calcimine-painted substrates.
(13) "Clear brushing lacquers" means clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid, protective film, that are:
(A) intended exclusively for application by brush; and
(B) labeled as specified in section 4(5) of this rule.
(14) "Clear wood coatings" means clear and semitransparent coatings, including lacquers and varnishes, applied to wood substrates to provide a transparent or translucent solid film.
(15) "Coating" means a material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, the following:
(A) Paints.
(B) Varnishes.
(C) Sealers.
(D) Stains.
(16) "Colorant" means a concentrated pigment dispersion of water, solvent, or binder that is added to an architectural coating after packaging in sale units to produce the desired color.
(17) "Concrete curing compound" means a coating labeled and formulated for application to freshly poured concrete to retard the evaporation of water.
(18) "Concrete surface retarder" means a mixture of retarding ingredients, such as:
(A) extender pigments;
(B) primary pigments;

(C) resin; and

(D) solvent;

that interact chemically with the cement to prevent hardening on the surface where the retarder is applied, allowing the retarded mix of cement and sand at the surface to be washed away to create an exposed aggregate finish.

(19) "Conjugated oil varnish" means a clear or semitransparent wood coating, labeled as such, excluding lacquers or shellacs, based on a natural occurring conjugated vegetable oil (tung oil) and modified with other natural or synthetic resins, a minimum of fifty percent (50%) of the resin solids consisting of conjugated oil. Supplied as a single component product, conjugated oil varnishes penetrate and seal the wood. Film formation is due to polymerization of the oil. These varnishes may contain small amounts of pigment to control the final gloss or sheen.

(20) "Conversion varnish" means a clear acid-curing coating with an alkyd or other resin blended with amino resins and supplied as a single component or two (2) component product. Conversion varnishes produce a hard, durable, clear finish designed for professional application to wood flooring. Film formation is the result of an acid-catalyzed condensation reaction, affecting a transetherification at the reactive ethers of the amino resins.

(21) "Dry fog coating" means a coating labeled and formulated only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.

(22) "Exempt compound" means a compound identified as exempt under the definition of VOC. The exempt compounds content of a coating shall be determined in accordance with Method 24 of 40 CFR Part 60, Appendix A* or SCAQMD Method 303-91 "Determination of Exempt Compounds", approved June 1, 1991, and revised February 1993*.

(23) "Faux finishing coating" means a coating labeled and formulated as a stain or a glaze to create artistic effects including, but not limited to, the following:

(A) Dirt.

(B) Old age.

(C) Smoke damage.

(D) Simulated marble.

(E) Simulated wood grain.

(24) "Fire-resistive coating" means an opaque coating labeled and formulated to protect structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials, that has been:

(A) fire tested and rated by a nationally recognized testing organization; and

(B) approved for use in bringing assemblies of structural materials into compliance with federal, state, and local building code requirements.

The fire-resistive coating shall be tested in accordance with ASTM E119-05a "Standard Test Methods for Fire Tests of Building Construction and Materials", November 2005*.

(25) "Fire-retardant coating" means a coating labeled and formulated to retard ignition and flame spread, that has been:

(A) fire tested and rated by a nationally recognized testing organization; and

(B) approved for use in bringing building and construction materials into compliance with federal, state, and local building code requirements.

The fire-retardant coating shall be tested in accordance with ASTM E84-05e1 "Standard Test Method for Surface Burning Characteristics of Building Materials", February 2005*.

(26) "Flat coating" means a coating that:

(A) is not defined under any other definition in this rule; and

(B) registers a gloss less than fifteen (15) on an eighty-five (85) degree gloss meter or less than five (5) on a sixty (60) degree gloss meter according to ASTM D523-89 "Standard Test Method for Specular Gloss", May 1999*.

(27) "Floor coating" means an opaque coating that is labeled and formulated for application to flooring, including, but not limited to, the following:

(A) Decks.

(B) Porches.

(C) Steps.

(D) Other horizontal surfaces that may be subjected to foot traffic.

(28) "Flow coating" means a coating labeled and formulated exclusively for use by electric power companies or their subcontractors to maintain the protective coating systems present on utility transformer units.

(29) "Form-release compound" means a coating labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood,

metal, or some material other than concrete.

(30) "Graphic arts coating or sign paint" means a coating labeled and formulated for hand application by artists using brush or roller techniques to indoor and outdoor signs, excluding structural components, and murals including the following:

(A) Letter enamels.

(B) Poster colors.

(C) Copy blockers.

(D) Bulletin enamels.

(31) "High-temperature coating" means a high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above two hundred four (204) degrees Celsius (four hundred (400) degrees Fahrenheit).

(32) "Impacted immersion coating" means a high performance maintenance coating formulated and recommended for application to steel structures subject to immersion in turbulent, debris-laden water. These coatings are specifically resistant to high energy impact damage by floating ice or debris.

(33) "Industrial maintenance coating" means a high performance architectural coating, including primers, sealers, undercoaters, intermediate coats, or topcoats, formulated for application to substrates exposed to one (1) or more of the following extreme environmental conditions and labeled as specified in section 4(4) of this rule:

(A) Immersion in water, wastewater, or chemical solutions (aqueous and nonaqueous solutions), or chronic exposures of interior surfaces to moisture condensation.

(B) Acute or chronic exposure to:

(i) corrosive, caustic, or acidic agents;

(ii) chemicals;

(iii) chemical fumes; or

(iv) chemical mixtures or solutions.

(C) Repeated exposure to temperatures above one hundred twenty-one (121) degrees Celsius (two hundred fifty (250) degrees Fahrenheit).

(D) Repeated (frequent) heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleansers, or scouring agents.

(E) Exterior exposure of metal structures and structural components.

(34) "Lacquer" means a clear or opaque wood coating, including clear lacquer sanding sealers, formulated with cellulosic or synthetic resins to:

(A) dry by evaporation without chemical reaction; and

(B) provide a solid, protective film.

(35) "Low-solids coating" means a coating containing twelve-hundredths (0.12) kilogram or less of solids per liter (one (1) pound or less of solids per gallon) of coating material.

(36) "Magnesite cement coating" means a coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

(37) "Manufacturer's maximum recommendation" means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

(38) "Mastic texture coating" means a coating labeled and formulated to:

(A) cover holes and minor cracks; and

(B) conceal surface irregularities;

that is applied in a single coat of at least ten mils (0.010 inch) dry film thickness.

(39) "Metallic pigmented coating" means a coating containing at least forty-eight (48) grams of elemental metallic pigment per liter of coating as applied (four-tenths (0.4) pounds per gallon) when tested in accordance with SCAQMD Method 318-95 "Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction", July 1996*.

(40) "Multicolor coating" means a coating that:

(A) is packaged in a single container; and

(B) exhibits more than one (1) color when applied in a single coat.

(41) "Nonflat coating" means a coating that:

(A) is not defined under any other definition in this rule; and

(B) registers a gloss of fifteen (15) or greater on an eighty-five (85) degree gloss meter and five (5) or greater on a gloss meter when held at a sixty (60) degree angle according to ASTM D523-89 "Standard Test Method for Specular Gloss", May 1999*.

(42) "Nonflat-high-gloss coating" means a nonflat coating that registers a gloss of seventy (70) or above on a sixty (60) degree gloss meter according to ASTM D523-89 "Standard Test Method for Specular Gloss", May 1999*.

(43) "Nonindustrial" use means any use of architectural coatings except in the construction or maintenance of any of the following:

(A) Facilities used in the manufacturing of goods and commodities.
(B) Transportation infrastructures, including the following:
(i) Highways.
(ii) Bridges.
(iii) Airports.
(iv) Railroads.
(C) Facilities used in mining activities, including petroleum extraction.
(D) Utilities infrastructures, including power generation and distribution and water treatment and distribution systems.

(44) "Nuclear coating" means a protective coating formulated and recommended to seal porous surfaces, such as steel (or concrete), that otherwise would be subject to intrusions by radioactive materials. These coatings must be resistant to long-term (service life) cumulative radiation exposure and be tested in accordance with ASTM Method D4082-89 "Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants", January 2002*. These coatings must also be relatively easy to decontaminate and resistant to various chemicals to which coatings are likely to be exposed and be tested in accordance with ASTM Method D3912-80 "Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants", approved January 2001*.

(45) "Person" has the meaning set forth in IC 13-11-2-158(a).

(46) "Postconsumer coating" means a finished coating that would have been disposed of in a landfill, having completed its usefulness to a consumer. The term does not include manufacturing wastes.

(47) "Pretreatment wash primer" means a primer that:
(A) contains a minimum of five-tenths percent (0.5%) acid, by weight, when tested in accordance with ASTM D1613-03 "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products", October 2003*; and
(B) is labeled and formulated for application directly to bare metal surfaces to:
(i) provide corrosion resistance; and
(ii) promote adhesion of subsequent topcoats.

(48) "Primer" means a coating labeled and formulated for application to a substrate to provide a firm bond between the substrate and subsequent coats.

(49) "Quick-dry enamel" means a nonflat coating that is labeled as specified in section 4(8) of this rule and that is formulated to have the following characteristics:
(A) Is capable of being applied directly from the container under normal conditions with ambient temperatures between sixteen (16) and twenty-seven (27) degrees Celsius (sixty (60) and eighty (80) degrees Fahrenheit).
(B) When tested in accordance with ASTM D1640-03 "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature", December 2003*:
(i) sets to touch in two (2) hours or less;
(ii) is tack free in four (4) hours or less;
(iii) dries hard in eight (8) hours or less by the mechanical test method; and
(iv) has a dried film gloss of seventy (70) or above on a sixty (60) degree meter.

(50) "Quick-dry primer, sealer, and undercoater" means a primer, sealer, or undercoater that:
(A) is dry to the touch in thirty (30) minutes; and
(B) can be recoated in two (2) hours when tested in accordance with ASTM D1640-03 "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature", December 2003*.

(51) "Recycled coating" means an architectural coating formulated such that not less than fifty percent (50%) of the total weight consists of secondary and postconsumer coating, with not less than ten percent (10%) of the total weight consisting of postconsumer coating.

(52) "Residence" means areas where people reside or lodge, including, but not limited to, the following:
(A) Single and multiple family dwellings.
(B) Condominiums.
(C) Mobile homes.
(D) Apartment complexes.
(E) Motels.
(F) Hotels.

(53) "Roof coating" means a nonbituminous coating labeled and formulated exclusively for application to roofs for the primary purposes of preventing penetration of the substrate by water or reflecting heat and ultraviolet radiation. The term does not include metallic pigmented roof coatings that qualify as metallic pigmented coatings. These roof coatings shall be considered to be in the metallic pigmented

coatings category.
(54) "Rust preventive coating" means a coating:
(A) formulated:
(i) exclusively for nonindustrial use; and
(ii) to prevent the corrosion of metal surfaces; and
(B) labeled as specified in section 4(6) of this rule.
(55) "Sanding sealer" means a clear or semitransparent wood coating labeled and formulated for application to bare wood to:
(A) seal the wood; and
(B) provide a coat that can be abraded to create a smooth surface for subsequent applications of coatings.
The term does not include a sanding sealer that also meets the definition of a lacquer, but it is included in the lacquer category.
(56) "SCAQMD" means the South Coast Air Quality Management District in California.
(57) "Sealer" means a coating labeled and formulated for application to a substrate to prevent:
(A) subsequent coatings from being absorbed by the substrate; or
(B) harm to subsequent coatings by materials in the substrate.
(58) "Secondary coating (rework)" means a fragment of a finished coating or a finished coating from a manufacturing process that has converted resources into a commodity of real economic value. The term does not include excess virgin resources of the manufacturing process.
(59) "Shellac" means a clear or opaque coating:
(A) formulated solely with the resinous secretions of the lac beetle (Laciffer lacca);
(B) thinned with alcohol; and
(C) formulated to dry by evaporation without a chemical reaction.
(60) "Shop application" means an application of a coating to a product or a component of a product in or on the premises of a factory or a shop as part of a:
(A) manufacturing;
(B) production; or
(C) repairing;
process.
(61) "Solicit" means to require for use or to specify, by written or oral contract.
(62) "Specialty primer, sealer, and undercoater" means a coating:
(A) labeled as required in section 4(7) of this rule; and
(B) formulated for application to:
(i) a substrate to seal fire, smoke, or water damage;
(ii) condition excessively chalky surfaces;
(iii) seal in efflorescence; or
(iv) block stains.
An excessively chalky surface is one that is defined as having a chalk rating of four (4) or less as determined by ASTM D4214-98 "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films", August 1998*.
(63) "Stain" means a clear, semitransparent, or opaque coating labeled and formulated to change the color of a surface but not conceal the grain pattern or texture.
(64) "Stone consolidant" means a coating that is labeled and formulated for application to stone substrates to repair historical structures that have been damaged by weathering or other decay mechanisms. Stone consolidants must:
(A) penetrate into stone substrates to create bonds between particles and consolidate deteriorated material; and
(B) be specified and used in accordance with ASTM E2167-01 "Standard Guide for Selection and Use of Stone Consolidants"*.
(65) "Swimming pool coating" means a coating labeled and formulated to:
(A) coat the interior of swimming pools; and
(B) resist swimming pool chemicals.
(66) "Swimming pool repair and maintenance coating" means a rubber-based coating labeled and formulated to be used over existing rubber-based coatings for the repair and maintenance of swimming pools.
(67) "Temperature-indicator safety coating" means a coating labeled and formulated as a color-changing indicator coating for:
(A) the purpose of monitoring the temperature and safety of the substrate, underlying piping, or underlying equipment; and
(B) application to substrates exposed continuously or intermittently to temperatures above two

hundred four (204) degrees Celsius (four hundred (400) degrees Fahrenheit).
(68) "Thermoplastic rubber coating and mastics" means a coating or mastic:
(A) formulated and recommended for application to roofing or other structural surfaces; and
(B) that incorporates not less than forty percent (40%) by weight of thermoplastic rubbers in the total resin solids and may also contain other ingredients including, but not limited to:
(i) fillers;
(ii) pigments; and
(iii) modifying resins.
(69) "Tint base" means an architectural coating to which colorant is added after packaging in sale units to produce a desired color.
(70) "Traffic marking coating" means a coating labeled and formulated for marking and striping streets, highways, or other traffic surfaces, including, but not limited to, the following:
(A) Curbs.
(B) Berms.
(C) Driveways.
(D) Parking lots.
(E) Sidewalks.
(F) Airport runways.
(71) "Undercoater" means a coating labeled and formulated to provide a smooth surface for subsequent coatings.
(72) "U.S. EPA" means United States Environmental Protection Agency.
(73) "Varnish" means a clear or semitransparent wood coating, excluding lacquers and shellacs, formulated to dry by chemical reaction. Varnishes may contain small amounts of pigment to:
(A) color a surface; or
(B) control the final sheen or gloss of the finish.
(74) "Volatile organic compound" or "VOC" means a compound as defined in 326 IAC 1-2-90.
(75) "Waterproofing concrete or masonry sealer" means a clear or pigmented coating that is labeled and formulated for sealing concrete and masonry to provide resistance against the following:
(A) Water.
(B) Alkalis.
(C) Acids.
(D) Ultraviolet light.
(E) Staining.
(76) "Waterproofing sealer" means a coating labeled and formulated for application to a porous substrate for the primary purpose of preventing the penetration of water.
(77) "Wood preservative" means a coating:
(A) labeled and formulated to protect exposed wood from decay or insect attack; and
(B) that is registered with the U.S. EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136).

*** These documents are incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 8-14-2)

326 IAC 8-14-3 Standards for AIM coatings

Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-12

Sec. 3. (a) Except as provided in subsections (c) and (d), on or after January 1, 2011, no person shall:
(1) manufacture, blend, or repackage for sale within the state of Indiana;
(2) supply, sell, or offer for sale within the state of Indiana; or
(3) solicit for application or apply within the state of Indiana;
any AIM coating with a VOC content in excess of the corresponding limit specified in subsection (b).

(b) Compliance with the VOC content limits shall not exceed the following limits:

Coating Category	VOC Limit	VOC Limit

	(grams/liter)	(pounds/gallon)
Flat coatings	**100**	**0.83**
Nonflat coatings	**150**	**1.25**
Nonflat-high-gloss coatings	**250**	**2.08**
Specialty coatings:		
Antenna coatings	**530**	**4.42**
Antifouling coatings	**400**	**3.33**
Bituminous roof coatings	**300**	**2.50**
Bituminous roof primers	**350**	**2.92**
Bond breakers	**350**	**2.92**
Calcimine recoaters	**475**	**3.96**
Clear wood coatings:		
Clear brushing lacquers	**680**	**5.67**
Lacquers, including clear lacquer sanding sealers	**550**	**4.59**
Sanding sealers, excluding clear lacquers	**350**	**2.92**
Varnishes other than conversion varnishes	**350**	**2.92**
Conjugated oil varnish	**450**	**3.75**
Conversion varnish	**725**	**6.04**
Concrete curing compounds	**350**	**2.92**
Concrete surface retarders	**780**	**6.50**
Dry fog coatings	**400**	**3.33**
Faux finishing coatings	**350**	**2.92**
Fire-resistive coatings	**350**	**2.92**
Fire-retardant coatings (clear)	**650**	**5.42**
Fire-retardant coatings (opaque)	**350**	**2.92**
Floor coatings	**250**	**2.08**
Flow coatings	**420**	**3.50**
Form-release compounds	**250**	**2.08**
Graphic arts coatings (sign paints)	**500**	**4.17**
High temperature coatings	**420**	**3.50**
Impacted immersion coatings	**780**	**6.50**
Industrial maintenance coatings	**340**	**2.83**
Low-solids coatings	**120**	**1.00**
Magnesite cement coatings	**450**	**3.75**
Mastic texture coatings	**300**	**2.50**
Metallic pigmented coatings	**500**	**4.17**
Multicolor coatings	**250**	**2.08**
Nuclear coatings	**450**	**3.75**
Pretreatment wash primers	**420**	**3.50**
Primers, sealers, and undercoaters	**200**	**1.67**
Quick-dry enamels	**250**	**2.08**
Quick-dry primers, sealers, and undercoaters	**200**	**1.67**
Recycled coatings	**250**	**2.08**
Roof coatings	**250**	**2.08**
Rust preventive coatings	**400**	**3.33**
Shellacs (clear)	**730**	**6.09**
Shellacs (opaque)	**550**	**4.59**
Specialty primers, sealers, and undercoaters	**350**	**2.92**
Stains	**250**	**2.08**
Stone consolidants	**450**	

Swimming pool coatings	**340**	**2.83**
Swimming pool repair and maintenance coatings	**340**	**2.83**
Temperature-indicator safety coatings	**550**	**4.59**
Thermoplastic rubber coatings and mastics	**550**	**4.59**
Traffic marking coatings (ozone season-May 1 to September 30)	**91**	**0.76**
Traffic marking coatings (nonozone season- October 1 to April 30)	**150**	**1.25**
Waterproofing sealers	**250**	**2.08**
Waterproofing concrete or masonry sealers	**400**	**3.33**
Wood preservatives	**350**	**2.92**
Conversion factor: one pound VOC per gallon (U.S.) = 119.95 grams per liter.		

(c) If anywhere on the container of an AIM coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf, any representation is made that indicates that the coating meets the definition or is recommended for use for more than one (1) of the categories listed in subsection (b), then the category with the most restrictive VOC content limit shall apply. This provision does not apply to the coating categories specified as follows:

(1) Lacquer coatings, including lacquer sending sealers.
(2) Metallic pigmented coatings.
(3) Shellacs.
(4) Fire-retardant coatings.
(5) Pretreatment wash primers.
(6) Industrial maintenance coatings.
(7) Low-solids coatings.
(8) Wood preservatives.
(9) High temperature coatings.
(10) Temperature-indicator safety coatings.
(11) Antenna coatings.
(12) Antifouling coatings.
(13) Flow coatings.
(14) Bituminous roof primers.
(15) Specialty primers, sealers, and undercoaters.
(16) Thermoplastic rubber coatings and mastics.
(17) Calcimine recoaters.
(18) Impacted immersion coatings.
(19) Nuclear coatings.

(d) The following sell through provisions apply to AIM coatings:
(1) A coating manufactured prior to January 1, 2011, may be sold, supplied, or offered for sale until January 1, 2014.
(2) A coating manufactured before January 1, 2011, may be applied at any time both before and after January 1, 2011, so long as the coating complied with the standards in effect at the time the coating was manufactured.
(3) The provisions in subdivisions (1) and (2) do not apply to any coating that does not display the date or date code required by section 4(1) of this rule.

(e) The following work practices are required:
(1) All AIM coatings containers used to apply the contents therein to a surface directly from the container by:
(A) pouring;
(B) siphoning;
(C) brushing;
(D) rolling;
(E) padding;
(F) ragging; or
(G) other means;
shall be closed when not in use.
(2) Containers of any VOC-containing materials used for thinning and cleanup shall be closed when

not in use.

(f) No person who applies or solicits the application of any AIM coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in subsection (b).

(g) No person shall apply or solicit the application of any rust preventative coating for industrial use, unless the rust preventative coating complies with the industrial maintenance coating VOC content limit specified in subsection (b).

(h) If a coating does not meet any of the definitions for the specialty coatings categories listed in subsection (b), the VOC content limit shall be determined by classifying the coating as a flat coating, nonflat coating, or nonflat-high-gloss coating as defined in section 2 of this rule. The corresponding flat or nonflat coating VOC content limit shall apply.

(Air Pollution Control Board; 326 IAC 8-14-3)

326 IAC 8-14-4 Container labeling

Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-12

Sec. 4. On and after January 1, 2011, each manufacturer of any AIM coating subject to this rule shall prominently display the following information on the coating container or label in which the coating is sold or distributed:

(1) A date code, as follows:
(A) The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid, or bottom of the container.
(B) If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the department.

(2) Thinning recommendations, as follows:
(A) A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container.
(B) This requirement does not apply to the thinning of architectural coatings with water.
(C) If thinning of a coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.

(3) VOC content, as follows:
(A) Each container of any coating subject to this rule shall display either the maximum or the actual VOC content of the coating, as supplied, including the maximum thinning recommended by the manufacturer.
(B) VOC content shall be displayed in grams of VOC per liter of coating.
(C) VOC content displayed shall be:
(i) calculated using product formulation data; or
(ii) determined using the test methods in section 6(b) of this rule.
The equations in section 6(a) of this rule shall be used to calculate VOC content.

(4) The label or the lid of the container in which an industrial maintenance coating is sold or distributed shall display one (1) or more of the following industrial maintenance coatings descriptions:
(A) "For industrial use only".
(B) "For professional use only".
(C) "Not for residential use".
(D) "Not intended for residential use".

(5) The labels of all clear brushing lacquers shall prominently display the following statements:
(A) "For brush application only".
(B) "This product must not be thinned or sprayed".

(6) The labels of all rust preventive coatings shall prominently display the statement "For metal substrates only".

(7) The labels of all specialty primers, sealers, and undercoaters shall prominently display one (1) or more of the following descriptions:
(A) "For blocking stains".

(B) "For fire-damaged substrates".
(C) "For smoke-damaged substrates".
(D) "For water-damaged substrates".
(E) "For excessively chalky substrates".
(F) "To seal in efflorescence".

(8) The labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time.

(9) The labels of all nonflat-high-gloss coatings shall prominently display the words "High Gloss".

(10) The labels of all stone consolidants shall prominently display the statement "Stone Consolidant-For Professional Use Only".

(Air Pollution Control Board; 326 IAC 8-14-4)

326 IAC 8-14-5 Recordkeeping and reporting requirements

Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-12

Sec. 5. (a) Each manufacturer of a product subject to a VOC content limit in section 3(b) of this rule shall keep records demonstrating compliance with the VOC content limits. The records shall clearly list each product by all of the following:

(1) Name.
(2) Identifying number if applicable.
(3) VOC content as determined by section 6 of this rule.
(4) Name or names and chemical abstract service (CAS) number of the VOC constituents in the product.
(5) Dates of the VOC content determinations.
(6) Coating category and applicable VOC content limit.

(b) The records required by subsection (a) shall be:

(1) kept for a period not less than five (5) years; and
(2) made available to the department for inspection within ninety (90) days of request.

(c) Each manufacturer shall, upon request of the department, provide data concerning the distribution and sales of coatings subject to a VOC content limit in section 3(b) of this rule. The manufacturer shall within ninety (90) days provide the following information:

(1) The name and mailing address of the manufacturer.
(2) The name, address, and telephone number of a contact person.
(3) The name of the product as it appears on the label and the coating category under which it is regulated, as listed in section 3(b) of this rule.
(4) Whether the coating is marketed for interior use or exterior use, or both.
(5) The number of gallons sold in the state of Indiana in containers greater than one (1) liter.
(6) The actual VOC content and VOC content in grams per liter. If thinning is recommended, list the actual VOC content and VOC content limit after recommended thinning.
(7) The names and CAS number of the VOC constituents in the product.

(d) Manufacturers of an AIM coating that contains perchloroethylene or methylene chloride shall, within thirty (30) days upon request of the department, submit a report to the department that includes the following information for the product sold in the state during the previous twelve (12) months from the date of the department's request:

(1) The product's brand name and a copy of the product label with the legible usage instructions.
(2) The coating category, listed in section 3(b) of this rule, to which the coating belongs.
(3) The total sales during the twelve (12) month period to the nearest gallon.
(4) The volume percent, to the nearest one-tenth of one percent (0.10%), of perchloroethylene and methylene chloride in the coating.

(e) Manufacturers of recycled coatings shall, within thirty (30) days upon request of the department, submit a letter to the department certifying their status as a recycled paint manufacturer. The report shall

include the following information for all recycled coatings for the previous twelve (12) months from the date of the department's request:

(1) The total number of gallons distributed in Indiana during the twelve (12) month period.

(2) A description of the method used by the manufacturer to calculate state distribution.

(f) Manufacturers of bituminous roof coatings or bituminous roof primers shall, within thirty (30) days upon request of the department, submit a report that includes the following information for the previous twelve (12) months from the date of the department's request:

(1) The total number of gallons of bituminous roof coatings or bituminous roof primers sold in Indiana during the twelve (12) month period.

(2) A description of the method used by the manufacturer to calculate state sales.

(Air Pollution Control Board; 326 IAC 8-14-5)

326 IAC 8-14-6 Compliance provisions and test methods

Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-12

Sec. 6. (a) For the purpose of determining compliance with the VOC content limits in section 3(b) of this rule, the VOC content of a coating shall be determined using the procedures described in subdivision (1) or (2), as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured. VOC content shall be determined as follows:

(1) With the exception of low-solids coatings, determine the VOC content in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water and exempt compounds, using the following equation:

$$\text{VOC Content} = \frac{(W_s - W_w - W_{ec})}{(V_m - V_w - V_{ec})}$$

Where:	**VOC Content**	**=**	**grams of VOC per liter of coating**
	W_s	=	**weight of volatiles, in grams**
	W_w	=	**weight of water, in grams**
	W_{ec}	=	**weight of exempt compounds, in grams**
	V_m	=	**volume of coating, in liters**
	V_w	=	**volume of water, in liters**
	V_{ec}	=	**volume of exempt compounds, in liters**

(2) For low solid coatings, determine the VOC content in units of grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, including the volume of any water and exempt compounds, using the following equation:

$$\text{VOC Content}_{ls} = \frac{(W_s - W_w - W_{ec})}{(V_m)}$$

Where:	VOC Content_{ls}	=	**the VOC content of a low-solids coating in grams per liter of coating**
	W_s	=	**weight of volatiles, in grams**
	W_w	=	**weight of water, in grams**

W_{ec}	=	weight of exempt compounds, in grams
V_m	=	volume of coating, in liters

(b) To determine the physical properties of a coating in order to perform the calculations in subsection (a), the reference method for VOC content is Method 24 of 40 CFR Part 60, Appendix A*, except as provided in subsections (c) and (d). An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91* "Determination of Volatile Organic Compounds in Various Materials", February 1996. The exempt compounds content shall be determined by SCAQMD Method 303-91* "Determination of Exempt Compounds", February 1993. To determine the VOC content of a coating, the manufacturer may use Method 24 of 40 CFR Part 60, Appendix A*, or an alternative method, as provided in subsection (c), formulation data, or any other reasonable means for predicting that the coating has been formulated as intended, for example, quality assurance checks, recordkeeping. However, if there are any inconsistencies between the results of a test conducted utilizing Method 24 of 40 CFR Part 60, Appendix A* and any other means for determining VOC content, the results of the test utilizing Method 24 of 40 CFR Part 60, Appendix A* will govern, except when an alternative method is approved as specified in subsection (c). The department may require the manufacturer to conduct an analysis using Method 24 of 40 CFR Part 60, Appendix A*.

(c) The use of alternative test methods demonstrated to provide results that are acceptable for purposes of determining compliance with subsection (b) after review and approval in writing by the department and the U.S. EPA may be used.

(d) Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of Method 24 of 40 CFR Part 60, Appendix A*. This method has not been approved for methacrylate multicomponent coatings used for purposes other than as traffic marking coatings or for other classes of multicomponent coatings.

***These documents are incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 8-14-6)

326 IAC 8-14-7 Application of traffic marking materials

Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-12

Sec. 7. (a) After January 1, 2011, during the ozone season (May 1 through September 30), no person may cause, allow, or permit the application of traffic marking material that exceeds the following limits:

(1) For traffic marking material that is a liquid at the time of application, the VOC content limits listed in section 3(b) of this rule.

(2) For field-reacted traffic marking material, or for traffic marking material that is not measurable as a liquid at the time of application, a VOC emission rate of three and six-tenths (3.6) kilograms per stripe-kilometer or twelve and two-tenths (12.2) pounds per stripe-mile.

(b) Any person subject to this section who applies traffic marking material shall maintain the following records:

(1) Types and amounts of traffic marking materials purchased annually.

(2) The VOC content or emission rate of each type of traffic marking material applied in any of the following:

(A) Grams per liter.

(B) Pounds per gallon.

(C) Kilograms per stripe-kilometer.

(D) Pounds per stripe-mile.

(3) Monthly quantities of each type of traffic marking material applied.

(c) The records required in subsection (b) shall be:
(1) kept for a period of five (5) years after the traffic marking material is applied; and
(2) made available to the department for inspection within ninety (90) days of the request.

(Air Pollution Control Board; 326 IAC 8-14-7)

Notice of Public Hearing

Posted: 07/21/2010 by Legislative Services Agency
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